

Abstract

In a waste disposal site for storing waste and residues of solid organic or inorganic substances, composites and mixtures thereof, arranged in the ground (22) is a trough comprising a trough bottom (14) and side walls, the trough bottom of which contains at least two water-tight layers (B, C) with constituents of a ceramic binder system (CBS). Arranged flat between the top water-tight layer (C) and the waste material (24_a) is at least one water-tight plastic film (26) on which compacted debris is stored as waste material (24_a). Moreover, there is a covering which contains at least two water-tight layers (B, C) on which there is arranged at least one seepage layer for dissipating rainwater.

Fig. 2

KEY TO FIGURESFigure 2

Verfestigtes Deponiergut = compacted waste material

Kunststofffolie = plastic film

Figure 4

Hausmüll = domestic waste

30 = dewatering

48 = separation of biomass

Wasser = water

32 = water treatment / clarification plant

34 = water for agriculture

Schlamm = sludge

Biogas = biogas

38 = sludge drying stage

Feststoffe = solids

Abwärme vom therm. Kraftwerk = waste heat from thermal power station

Figure 5

38 = dewatering

48 = separation of biomass

Biomasse = biomass

56 = separation of metals/plastics

50 = composting plant

Reststoff = residue

60 = impact plant

Metalle = metals

Restkunststoffe = residual plastics

Kompost = compost

Biogas = biogas

Von Schlammtrocknung = from sludge drying stage

46 = gas engine

Elektr. Energie = electrical energy

Figure 6

48 = separation of biomass

56 = separation of metals/plastics
68 = separation of residues
Metalleverbund = metal composite
60 = impact plant
Metalle = metals
Restkunststoffe = residual plastics
64 = identification / separation
Brennstoff Aufbereitung = fuel reprocessing stage
66 = regranulation, extrusion
Fertigprodukt = finished product

Figure 7

56 = separation of metals/plastics
68 = separation of residues
Sondermüll = special waste
Mineralstoffe = mineral substances
Papier, Holz, Restorganik = paper, wood, residual organics
64 = identification / separation
66 = regranulation, extrusion
Fertigprodukt = finished product
Restkunststoffe = residual plastics
70 = fuel reprocessing stage
Brennstoff = fuel
Abwärme = waste heat
Therm. Kraftwerk = thermal power station
Aschen, Schlacken = ashes, slag
CBS-Verfahren = CBS method
Von Schlammtrocknung = from sludge drying stage
Zu Schlammtrocknung = to sludge drying stage
Elektr. Energie = electrical energy

Figure 8

68 = separation of residues
Reststoffe = residues
Mineralstoffe = mineral substances
Papier, Holz, Restorganik = paper, wood, residual organics
78 = immobilization
24a = stabilized waste material

Deponie = waste disposal site

Mineralstoffe = mineral substances

74 = CBS method

Bauindustrie = construction industry

Papier, Holz, Restorganik = paper, wood, residual organics

70 = fuel reprocessing stage

72 = thermal power station

Aschen, Schlacken = ashes, slag

Figure 9

MVA-Schlacke = MVA slag

75 = sieving

Grobteile = coarse grains

Feinteile = fine grains

Fremdstoffe = foreign substances

Gereinigte Feinteile = purified fine grains

Hüttensande = slag sand

Kraftwerksasche = power station ash

Gerüstsilikate = tectosilicates

76 = mixing and grinding